

As the Examiner will note, original claim 1 has been amended to include the subject matter of claim 2, and correspondingly, claim 2 has been canceled from the present application. Also, claims 11 and 12 have been added to the present application, newly added claim 11 representing a combination of claims 1 and 6 as originally filed, and newly added claim 12 representing the combination of claims 1 and 8 as originally filed. Correspondingly, claims 6 and 8 have been canceled from the present application.

The Japanese (100) reference does not show active portions which are connected by the inactive portion. As shown in page 5 of the Japanese reference, the active portions (fingers) are connected by a portion 17 which is not an inactive portion as defined in claim 1, that is, a portion which is layered structure of alternating auxiliary electrodes and common electrodes. Thus, claim 1 as amended is clearly distinguishable over the Japanese (100) reference. Furthermore, since the connection portion is made out of the same layered structure as the active portions, the manner of producing the actuator is simpler. None of the references relied upon by the Examiner, either alone or in combination, shows a connection portion constituted from a layered structure.

Independent claim 11 recites a second inactive portion adjacent to a portion of the bottom face. Japanese (100) reference only shows one inactive portion (that portion comprising electrodes 6), and since the Japanese

reference or any other references for that matter, shows or even remotely suggests the use of a second inactive portion, it is believed that claim 5 is clearly new and unobvious over the prior art relied upon by the Examiner.

Newly independent claim 12 recites a flexible receiving member covering an ink channel and the piezoelectric actuator bonded to the flexible receiving member. Since neither the Japanese (100) reference nor any of the other references relied upon by the Examiner shows this feature, it is also believed that claim 7 is new and unobvious over the references relied upon by the Examiner.

Accordingly, in view of the above amendments and remarks, reconsideration of the rejections and allowance of all the claims of the present application are respectfully requested.

Conclusion

Attached hereto is a marked-up version of the changes made to the application by this Amendment.

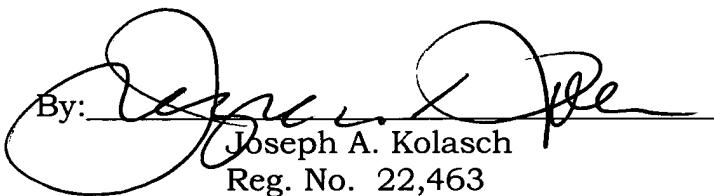
In the event there are any matters remaining in this application, the Examiner is invited to contact Mr. Joseph A. Kolasch, Registration No. 22,463 at (703) 205-8000 in the Washington, D.C. area.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit

Account No. 02-2448 for any additional fees required under 37 C.F.R. §§1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

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Enclosure: Marked Up Version of Claim Amendments



VERSION SHOWING AMENDMENTS MADE

IN THE CLAIMS

Please delete claims 2, 6 and 8 without prejudice or disclaimer of the subject matter contained therein.

Please amend the claims to read as follows:

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O.H.
a → the
1. — (Amended) A piezoelectric actuator for an ink jet printhead, comprising:

- a block body of piezoelectric material having a bottom face through which the mechanical energy of the actuator is transferred to a receiving member, said body having an active portion adjacent to the bottom face as well as an inactive portion;

- a layered structure of alternating signal electrodes and common electrodes arranged in the active portion, substantially parallel with the bottom face and separated by layers of the piezoelectric material, wherein each signal electrode is neighbored by at least one common electrode and each common electrode is neighbored by at least one signal electrode;

- a layered structure of alternating auxiliary electrodes and common electrodes arranged in the inactive portion, substantially parallel with the bottom face and separated by layers of the piezoelectric material, wherein each

auxiliary electrode is neighbored by at least one common electrode and each common electrode is neighbored by at least one auxiliary electrode;

- at least one signal lead electrode formed on a first side face of said block body of piezoelectric material and interconnecting the signal electrodes;

- a ground lead electrode formed on a second side face opposite to the first side face and interconnecting the common electrodes;

- and an auxiliary lead electrode interconnecting the auxiliary electrodes, wherein the auxiliary lead electrode is formed on a third side face of the block body, wherein the active portion is divided into a plurality of fingers arranged in parallel to one another and integrally connected with each other by the said inactive portion of the block body.

7.— (Amended) The piezoelectric actuator according to claim 611, wherein the auxiliary electrodes extend over both inactive portions of the block body, and dummy electrodes are provided in the second active portion, each dummy electrode being arranged in the same plane as a corresponding one of the common electrodes and being electrically connected to the auxiliary lead electrode.

9.— (Amended) The ink jet printhead according to claim 812, wherein a connecting piece electrically connects the signal electrodes and common

electrodes of the actuator and is disposed on a top face of the block body opposite to the bottom face thereof.

CLAIMS 11-12 HAVE BEEN ADDED